retroperitoneal haematoma, but the patient did in fact have both.

In most patients with haemophilia with a retroperitoneal haematoma the haematoma resolves after factor viii transfusion and in most no radiological investigations, other than plain chest and abdominal radiographs, are carried out. Splenic rupture can be difficult to diagnose clinically even in a normal person in the absence of massive acute intraperitoneal bleeding with collapse and shock. Fortunately, since spleen imaging using colloid particles with a radioactive label (taken up by the endothelial cells of the liver and spleen) is now readily available in most large centres, the problem is relatively easily resolved, provided that the possibility of the underlying rupture is considered. Demonstrations of splenic laceration by isotope imaging have been recorded,[4 10 11] but such a wide separation of the fragments as occurred in our case has not been described.

Clearly the possibility of splenic rupture should be considered in all haemophiliacs who present with abdominal pain and in whom there is a history of upper abdominal or lower chest injury.

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SHORT REPORTS

Primary gout affecting the sternoclavicular joint

Primary gout is rare in females and usually affects them after the menopause.[1 2] We report the case of a girl who presented with an acute gouty arthritis of the right sternoclavicular joint. We could find no previous report of acute gouty arthritis affecting the sternoclavicular joint.

Case report

An 18-year-old girl was admitted to hospital with a three-day history of throbbing pain, swelling, and tenderness in the right sternoclavicular joint which had been treated with antibiotics. Examination confirmed these signs together with cellulitis over the joint. The other joints were normal, and no abnormality was found on general examination. Her temperature was 37·7°C, the erythrocyte sedimentation rate 60 mm in 1 h, and the white cell count $7{\cdot}4 \times 10^9$/l (7400/mm^3) with a normal differential. Pyogenic arthritis was diagnosed and the patient started on cloxacillin 500 mg four times a day by mouth. Radiographs of the chest and both sternoclavicular joints were normal. Tests for serum immunoglobulins, antinuclear factor, rheumatoid factor, sheep cell agglutination titre, LE cell preparation, and serological tests (Wasserman, Kahn, and Reiter) for syphillis were also negative. The day after admission the affected joint was aspirated and 2 ml of blood-stained fluid removed. Bacterial and tubercle bacilli cultures were negative.

The treatment effected little improvement in the joint. Five days after admission a routine biochemical screen showed a serum uric acid level of 0·67 mmol/l (11·3 mg/100 ml) (normal 0·15-0·45 mmol/l (2·5-7·5 mg/100 ml)), which suggested a diagnosis of gouty arthritis. Serum uric acid levels remained consistently raised (0·66, 0·65 mmol/l (11·1, 10·9 mg/100 ml)). The hyperuricaemia, negative culture of the joint aspirate, and lack of response to antibiotic treatment all pointed to a diagnosis of acute gouty arthritis. Unfortunately, the joint aspirate was not examined for urate crystals. There was no history of diuretic intake and no family history of gout or other joint disease. The serum uric acid levels of both parents were normal (father 0·36 mmol/l (6·0 mg/100 ml) and mother 0·21 mmol/l (3·6 mg/100 ml)). The patient showed no evidence of an associated cause of gout. Her bone marrow and serum levels of lactate, triglyceride, cholesterol and lipoprotein were all normal, as were also the serum creatinine and creatine clearance. Uric acid excretion was within normal limits (2·8 and 3·0 mmol/24 h (480 and 500 mg/24 h)).[3]

The patient was given phenylbutazone 200 mg and allopurinol 100 mg three times a day by mouth. Two days later the joint greatly improved and the phenylbutazone was discontinued. The serum uric acid level returned to normal (0·26 mmol/l (4·4 mg/100 ml)) and within a week the arthritis had completely subsided. The allopurinol was continued after discharge. After seven months there had been no recurrence of symptoms. Her serum uric acid and her renal function were within normal limits.

Discussion

Primary or idiopathic gout affects women in 3-7% of cases.[1 2] The typical initial attack is monoarticular, affecting the metatarsophalangeal joint of the big toe in at least 50% of cases.[2] When another joint is the one affected diagnosis may be delayed for a long time.[4] Durward,[5] analysing 1012 cases of gout, found that 48·6% of the cases of primary gout were admitted as emergencies and that 40% of these were misdiagnosed. Among the erroneous diagnoses were haemarthrosis, cellulitis, osteoarthritis, pyogenic arthritis, and fractures. The fact that the sternoclavicular joint was affected in our case resulted both in a misdiagnosis and in a delay in diagnosis of five days. Among the rarer joints to be affected are the sacroiliac, lumbar spine, atlas vertebra, and the lower thoracic spine.[1]

We thank Mr J G Mathews for permission to report this case.
Requests for reprints should be sent to Dr G R Sant.

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Prolactin and human red blood cells

Histochemical studies[1 2] suggest that rat and human red blood cells may bind prolactin. The human results were dismissed as artifacts, but we have evidence that this interpretation may have been incorrect.[2] Our findings have important practical implications for the processing of blood samples for prolactin estimations.

Method and results

Blood samples were taken at 10 am from 10 normal women and 9 normal men and aliquots were spun down either immediately or after incubation at various time intervals up to five days at 4°C, 22°C, and 37°C. Plasma samples